APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,513	06/23/2003	Kenneth J. Crisler	CM05315G	9720

22917 7590 06/02/2005		EXAMINER
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196		MILLER, BRANDON J

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 January 2005</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendrey in view of Hayashi.

Regarding claim 1 Hendrey teaches a method of dynamically determining a community of entities in a communications system having a plurality of entities (see col. 6, lines 20-37 & 49-53). Hendrey teaches determining the location of at least a portion of the plurality of entities within a first coverage area (see col. 5, lines 29-35 and col. 6, lines 32-37). Hendrey teaches detecting that a predetermined proximity threshold has been met (see col. 6, lines 20-31 & 49-52). Hendrey teaches generating a list of entities that are in proximity to a predetermined distance within which the proximity threshold criteria was met (see col. 6, lines 49-53). Hendrey teaches determining whether at least one community can be defined comprising at least two entities from the list (see col. 6, lines 54-64). Hendrey does not specifically teach computing an entity density function for a plurality of density calculation zones within a first coverage area as a function of a determined location of the entities, or detecting if a predetermined proximity density threshold has been exceeded in at least one density calculation zone. Hayashi teaches computing an entity density function for a plurality

of density calculation zones within a first coverage area as a function of a determined location

of the entities, and detecting if a predetermined proximity density threshold has been exceeded

in at least one density calculation zone (see col. 2, lines 44-53 and col. 6, lines 1-20). It would

have been obvious to one of ordinary skill in the art at the time the invention was made to

make the device adapt to include computing an entity density function for a plurality of density

calculation zones within a first coverage area as a function of a determined location of the

entities, and detecting if a predetermined proximity density threshold has been exceeded in at

least one density calculation zone because this would allow for an improved method for setting

up communications for a group of mobile radio subscribers in a mobile radio network.

Regarding claim 2 Hendrey teaches defining at least one community comprising at least

two entities from a list (see col. 6, lines 54-56 & 59-64).

Regarding claim 3 Hendrey teaches sending default community information to each

entity in a defined community (see col. 6, lines 26-30 & 32-37).

Regarding claim 4 Hendrey teaches a defined community that is a talk group (see col. 7,

lines 28-31).

Regarding claim 5 Hendrey teaches a defined community that is a multicast list (see col.

6, lines 49-56).

Regarding claim 6 Hendrey teaches determining whether a community can be established

including determining whether at least two entities from a list are authorized to join the

community (see col. 6, lines 49-53 & 61-64).

Regarding claim 7 Hendrey teaches defining at least one preliminary community

comprising at least two entities from the list (see col. 6, lines 49-53 & 61-67); and enabling a

community to be modified (see col. 7, lines 9-12 & 23-31).

Regarding claim 8 Hendrey teaches determining whether a community can be established comprises determining whether at least two entities from the list have at least one common predetermined communications capability (see col. 6, lines 32-41).

Regarding claim 9 Hendrey teaches a communications capability that is a common media capability (see col. 4, lines 16-20).

Regarding claim 10 Hayashi teaches entities that are located within the density calculation zone for which the density threshold was exceeded (see col. 6, lines 1-5 & 15-17).

Regarding claim 11 Hayashi teaches entities that are located within a predetermined radius of the density calculation zone for which the proximity density threshold was exceeded (see col. 6, lines 1-8 & 15-20).

Regarding claim 12 Hayashi teaches each density calculation zone comprises a portion of a first coverage area and the density calculation zones have overlapping coverage areas (see abstract and col. 6, lines 5-8).

Regarding claim 13 Hayashi teaches a density calculation zone that comprises uniform sized portions of a first coverage area (see col. 6, lines 18-20)

Regarding claim 14 Hayashi teaches an entity density computation for each density calculation zone comprising determining the number of entities within the density calculation zone (see col. 6, lines 15-20).

Regarding claim 15 Hayashi teaches a proximity density threshold that is statistically configured (see col. 6, lines 15-20).

Regarding claim 16 Hayashi teaches a proximity density threshold that is dynamically

determined (see col. 6, lines 15-20).

Regarding claim 17 Hendrey teaches determining whether a community can be established is based on user preference (see col. 6, lines 26-30 & 49-53).

Regarding claim 18 Hendrey teaches a method of dynamically determining a community of entities in a communications system having a plurality of entities (see col. 6, lines 20-37 & 49-53). Hendrey teaches determining the location of at least a portion of the plurality of entities within a first coverage area (see col. 5, lines 29-35 and col. 6, lines 32-37). Hendrey teaches detecting that a predetermined proximity threshold has been met (see col. 6, lines 20-31 & 49-52). Hendrey teaches generating a list of entities that are in proximity to a predetermined distance within which the proximity threshold criteria was met (see col. 6, lines 49-53). Hendrey teaches determining whether at least one community can be defined comprising at least two entities from the list (see col. 6, lines 54-64). Hendrey does not specifically teach computing an entity density function for a plurality of density calculation zones within a first coverage area as a function of a determined location of the entities, determining the number of entities within the density calculation zone or detecting if a predetermined proximity density threshold has been exceeded in at least one density calculation zone. Hayashi teaches computing an entity density function for a plurality of density calculation zones within a first coverage area as a function of a determined location of the entities, and detecting if a predetermined proximity density threshold has been exceeded in at least one density calculation zone (see col. 2, lines 44-53 and col. 6, lines 1-20). Hayashi teaches an entity density computation for each density calculation zone comprising determining the number of entities within the density calculation zone (see col. 6, lines 15-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was

made to make the device adapt to include computing an entity density function for a plurality

of density calculation zones within a first coverage area as a function of a determined location

of the entities, determining the number of entities within the density calculation zone or

detecting if a predetermined proximity density threshold has been exceeded in at least one

density calculation zone because this would allow for an improved method for setting up

communications for a group of mobile radio subscribers in a mobile radio network.

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Chavez, Jr. U.S Patent No. 6,198,938 discloses dynamic associative terminating

extension groups.

Gosselin U.S. Patent No. 6,738,639 discloses reducing signaling traffic with multicasting

in a wireless communication network.

He U.S. Patent No. 6,754,500 discloses a channel grouping system and method for a

wireless communication system.

Toyryla et al. Pub. No.: US 2003/0083086 A1 discloses a method for creating a dynamic
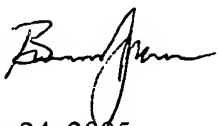
talk group.

Motegi et al. Pub. No.: US 2001/0027111 A1 discloses a group communication system for mobile terminals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 24, 2005

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600